

What is claimed is:

1. A closure for cable connection comprising:

a pair of sleeve members formed with a semicylindrical shape and joined to each other in a manner to be vertically separable from each other, resulting in providing a cylindrical sleeve which surrounds a cable connection section, said sleeve members each having abutting joint surfaces formed on both sides thereof, through which said sleeve members are joined together;

end plates arranged on opposite ends of said sleeve and each formed with at least one cable guide hole through which a cable connected to said cable connection section is inserted;

hinges and fasteners releasibly hooked between said sleeve members to integrally connect said sleeve members to each other through said abutting joint surfaces arranged opposite to each other;

said end plates each being formed with a slit in a manner to extend from said cable guide hole to a portion of said end plate in proximity to an outer periphery of said end plate so as to permit a wall of said end plate to open by cutting along said slit;

said cable guide hole being provided thereon with a thin-wall cap capable of being removed by cutting and said slit being detachably fitted therein with a rigidity holding member; and

~~an adhesive tape like gasket~~ ^{a gasket including an adhesive} interposed between said outer periphery of said end plate and an inner surface of said sleeve so as to cover an outer end of said slit.

2. A closure for cable connection as defined in claim 1, wherein said end plate is removably fitted therein with at least one opening prevention connection member which extends over both sides of said slit; and

said end plate is removably fitted therein with a second rigidity holding member in a manner to be positioned at a central portion thereof between the cable guide holes and abutted against an end wall of said sleeve.

3. A closure for cable connection as defined in claim

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1, wherein said cable guide hole of said end plate is detachably fitted therein with a third rigidity holding member.

4. A closure for cable connection as defined in claim 1, further comprising at least one cable clamp arranged ~~between said opposite ends of said recess~~ opposite to one of said end plates and provided with at least one cable insertion portion through which the cable is fittedly inserted; wherein

said cable clamp includes a clamp body formed with at least one cable guide recess and a pivotal support;

at least one curved holding member is arranged opposite to said cable guide recess and pivotally supported by said pivotal support;

said curved holding member is fastened at a free end thereof to said clamp body of said cable clamp by means of a mounting member; and

said cable guide recess and curved holding member are detachably provided with holding spacers in a manner to be opposite to each other, respectively.

5. A closure for cable connection as defined in claim 2, wherein said opening prevention connection member and second rigidity holding member are fitted in respective recesses formed on an outer surface of said end plate and provided on surfaces thereof opposite to said end plate with mating engagements, respectively.

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6. A closure for cable connection as defined in claim 4, wherein said opening prevention connection member and second rigidity holding member are fitted in respective recesses formed on an outer surface of said end plate and provided on surfaces thereof opposite to said end plate with mating engagements, respectively.

7. A closure for cable connection as defined in claim 4, wherein said end plate is provided on an inner surface thereof with a holder in a manner to be projected therefrom, said holder being formed with a recess; and

said cable clamp is provided with a projection adapted to fit in said recess of said holder.

8. A closure for cable connection as defined in claim

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Sub 4, wherein said curved holding member of said cable clamp is constructed in the form of an arm-like member which is provided at one end thereof with a pivotal pin for enabling pivotal movement of said curved holding member and at the other end thereof acting as a free end thereof with an insertion hole for said mounting member; and

said pivotal pin is detachably inserted through a holding recess formed on said clamp body of said cable clamp.

9. A closure for cable connection as defined in claim 4, wherein said mounting member for fastening said curved holding member to said clamp body of said cable clamp comprises a screw threadedly inserted into a pivotal element pivotally supported on said clamp body of said cable clamp;

said screw including a screw head held on said free end of said curved holding member.

10. A closure for cable connection as defined in claim 8, wherein said mounting member for fastening said curved holding member to said clamp body of said cable clamp comprises a screw threadedly inserted into a pivotal element pivotally supported on said clamp body of said cable clamp;

said screw including a screw head held on said free end of said curved holding member.

11. A closure for cable connection as defined in claim 4, wherein said holding spacers are each constructed of an arcuate element formed on an arcuate inner peripheral surface thereof with a peak-and-valley shaped groove and on an outer peripheral surface thereof with a projection;

said projection being detachably fitted in a recess ~~on~~ ~~a hole~~ formed at a corresponding one of said cable guide recess and curved holding member.

12. A closure for cable connection as defined in claim 8, wherein said holding spacers are each constructed of an arcuate element formed on an arcuate inner peripheral surface thereof with a peak-and-valley shaped groove and on an outer peripheral surface thereof with a projection;

said projection being detachably fitted in a recess ~~or~~ ~~a hole~~ formed at a corresponding one of said cable guide

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recess and curved holding member.

13. A closure for cable connection as defined in claim 4, wherein said holding spacers are each slidably mounted on a fitting surface of a corresponding one of said cable guide recess and curved holding member; and

said holding spacers are each formed thereon with at least one arcuate surface which corresponds to the outer periphery of the cable.

14. A closure for cable connection as defined in claim 13, wherein said cable clamp includes distance pieces which are interposedly arranged between a corresponding one of said holding spacers and said cable guide recess and between a corresponding one of said holding spacers and said curved holding member, respectively.

15. A closure for cable connection as defined in claim 13, wherein said holding spacers each comprise a first spacer member and a second spacer member which are detachably joined together through arcuate surfaces formed thereon in correspondence to the outer periphery of the cable.

16. A closure for cable connection as defined in claim 13, wherein said holding spacers are each provided on said arcuate surface with a plurality of ribs which are projectedly arranged at intervals and extend in a direction perpendicular to an axis of the cable.

17. A closure for cable connection as defined in claim 15, wherein the arcuate surface of said first spacer member is formed to be concave and provided thereon with a plurality of ribs which are projectedly arranged at intervals and which extend in a direction perpendicular to an axis of the cable; and

the arcuate surface of said second spacer member is formed to be convex and formed thereon with a plurality of grooves into which said ribs of said first spacer member are fitted.

18. A closure for cable connection as defined in claim 13, wherein said holding spacers are each formed with a pair of arcuate surfaces of different curvatures which are

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adaptable to different outer peripheries of cables and which are curved in opposite directions.

19. A closure for cable connection as defined in claim 15, wherein the arcuate surface of said first spacer member is a first concave surface of a large radius and formed therein with a fitting hole;

said first spacer member is formed with a second concave surface of a small radius on an end thereof remote from said first concave surface;

the arcuate surface of said second spacer member is a convex surface conforming with said first concave surface of said first spacer member and provided thereon with a connection rod adapted to be fitted in said fitting hole of said first spacer member; and

said second spacer member is formed with a third concave surface of an intermediate radius on an end thereof remote from said convex surface.

20. A closure for cable connection as defined in claim 13, wherein said clamp body of said cable clamp is provided with a loosening prevention piece for preventing a corresponding one of said holding spacers from loosening; and

said corresponding one of said holding spacers includes an engagement pawl and is provided with a stopper for fixing said engagement pawl to said loosening prevention piece.

21. A closure for cable connection as defined in claim 13, wherein said fitting surface and a mating surface of each of said holding spacers are respectively formed with a plurality of serrated protrusions ~~or teeth~~ which extend in parallel with an axis of the cable.

22. A closure for cable connection as defined in claim 1, wherein said hinges include a plurality of first ring receiving portions formed at a portion of one of said sleeve members in proximity to one of side edges thereof in a manner to be spaced from each other, hinge members each constituted by a first ~~loop-like~~ ring pivotally arranged at a corresponding one of said first ring receiving portions and a plurality of holding recesses for said hinge members, which

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holding recesses are arranged at a portion of the other of said sleeve members in proximity to one of side edges therein in a manner to be spaced from each other; and

said fasteners include a plurality of second ring receiving portions formed at a portion of said other sleeve member in proximity to the other side edge in a manner to be spaced from each other, second ~~loop-like~~ rings each pivotally arranged at a corresponding one of said second ring receiving portions, operation levers each pivotally supported at a corresponding one of said second ~~loop-like~~ rings and provided at a distal end thereof with a holding projection, and a plurality of fastener receiving portions which are formed at a portion of said one sleeve member in proximity to the other side edge thereof in a manner to be spaced from each other and in which said holding projections of said operation levers are respectively fitted.

23. A closure for cable connection as defined in claim 22, further comprising gaskets arranged between said abutting joint surfaces of said sleeve members;

said abutting joint surfaces each being chamfered on an outer edge thereof so as to form a recess between the outer edges thereof;

said second ~~loop-like~~ ring of at least one of said fasteners including a retaining member fitted in said recess of said outer edges of said abutting joint surface so as to be arranged along an outside of one of said gaskets.

24. A closure for cable connection as defined in claim 23, wherein said first ~~loop-like~~ ring of at least one of said hinges includes a retaining member fitted in said recess of said outer edges of said abutting joint surface so as to be arranged along an outside of one of said gaskets.

25. A closure for cable connection as defined in claim 24, wherein said retaining member is arranged at said ~~loop-like~~ ring of each of the fastener and hinge positioned on opposite ends of said sleeve in a longitudinal direction thereof.

26. A closure for cable connection as defined in claim

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22, further comprising a stopper for holding said first loop-like ring of the hinge at a predetermined angle when said first loop-like ring is pivotally moved about a ring insertion portion formed at said first ring receiving portion;

said stopper being projectedly arranged in proximity to said ring receiving portion of one of said sleeve members.

27. A closure for cable connection as defined in claim 1, wherein said abutting joint surfaces of each of said upper and lower sleeve members are each provided thereon with a recess for fittedly holding a gasket therein in a manner to extend in a longitudinal direction thereof;

said recess being so formed that opposite ends thereof are each reduced in width, to thereby provide a gasket press-fit portion for pressedly fittedly holding said gasket therein.

28. A closure for cable connection as defined in claim 1, wherein said abutting joint surfaces of each of said upper and lower sleeve members are each provided thereon with a recess for fittedly holding a gasket therein in a manner to extend in a longitudinal direction thereof;

said upper and lower sleeve members are each provided with barriers at different portions thereof defined along said recess and on both side edges thereof deviated from each other in the longitudinal direction thereof; and

said barriers of one of said sleeve members are mutually abutted against an inner surface of the other sleeve member to join said sleeve members to each other.

29. A closure for cable connection as defined in claim 1, wherein an airtight tape is wound around an outer periphery of the cable which extends through said cable guide hole so as to provide sealing between the outer periphery of the cable and an inner periphery of said cable guide hole;

said airtight tape being made of a thermoplastic rubber composition which exhibits a penetration of 40 to 90 (10^{-1} mm), an elongation of 1500 to 2000 percent and a tensile stress of 0.5 to 1.5 kgf/cm².

30. A closure for cable connection as defined in claim

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4, ~~wherein~~ ^{further comprising} an airtight tape ~~is~~ wound around an outer periphery of the cable which extends through said cable guide hole so as to provide sealing between the outer periphery of the cable and an inner periphery of said cable guide hole;

said airtight tape being made of a thermoplastic rubber composition which exhibits a penetration of 40 to 90 (10^{-1} mm), an elongation of 1500 to 2000 percent and a tensile stress of 0.5 to 1.5 kgf/cm².

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